

## PROPHYLACTIC AND THERAPEUTIC IMMUNIZATION AGAINST PROTOZOAN INFECTION AND DISEASE

## **Abstract**

Polypeptide and polynucleotide vaccines effective to treat or prevent infection of a mammal, such as a dog, a cat, or a human, by a protozoan. Methods of treatment and prevention are also provided, including therapeutic administration of the vaccine to an infected mammal to prevent progression of infection to a chronic debilitating disease state. Preferred embodiments of the polynucleotide vaccine contain nucleotide coding regions that encode polypeptides that are surface-associated or secreted by *T. cruzi*. Optionally the efficacy of the polynucleotide vaccine is increased by inclusion of a nucleotide coding region encoding a cytokine. Preferred embodiments of the polypeptide vaccine include immunogenic peptides that contain membrane transducing sequences that allow the polypeptides to translocate across a mammalian cell membrane.

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HINGTON, D.C. 20231

PRINTED NAME

JILL P. JULE

PRINTED NAME